

Department of Energy (DOE) Office of Energy Efficiency and Renewable Energy (EERE)

ASSISTING FEDERAL FACILITIES WITH ENERGY CONSERVATION TECHNOLOGIES (AFFECT) 2017

Funding Opportunity Announcement (FOA) Number: DE-FOA-0001667

FOA Type: Initial

CFDA Number: 81.117

FOA Issue Date:	November 22, 2016
Informational Webinar:	December 13, 2016
Submission Deadline for Letter of Intent:	December 22, 2016, 5:00pm ET
Submission Deadline for Full Applications:	January 30, 2017, 5:00pm ET
Expected Submission Deadline for Replies to Reviewer Comments:	April 3, 2017, 5:00pm ET
Expected Date for EERE Selection Notifications:	June 21, 2017
Expected Timeframe for Award Negotiations	July 1, 2017– September 1, 2017

- Applicants must submit a Letter of Interest by 5:00pm ET on the due date listed above to be eligible to submit a Full Application.
- To apply to this FOA, applicants must register with and submit application materials through EERE Exchange at <https://eere-Exchange.energy.gov>, EERE's online application portal.
- Applicants must designate primary and backup points-of-contact in EERE Exchange with whom EERE will communicate to conduct award negotiations. If an application is selected for award negotiations, it is not a commitment to issue an award. It is imperative that the applicant/selectee be responsive during award negotiations and meet negotiation deadlines. Failure to do so may result in cancelation of further award negotiations and rescission of the Selection.

Questions about this FOA? Email FOA.AFFECT4.ee.doe.gov.
Problems with EERE Exchange? Email EERE- EERE-ExchangeSupport@hq.doe.gov Include FOA name and number in subject line.

Table of Contents

I. Funding Opportunity Description	4
A. Description/Background.....	4
B. Topic Areas/Technical Areas of Interest.....	5
i. Topic Area 1: Combined Heat and Power (CHP).....	6
ii. Topic Area 2: Renewable Energy	6
iii. Topic Area 3: Energy Efficiency Deep Retrofits	8
C. Applications Specifically Not of Interest.....	8
D. Authorizing Statutes.....	9
E. Project Performance Targets.....	9
II. Award Information	12
A. Award Overview	12
i. Estimated Funding	12
ii. Period of Performance	13
iii. Payment.....	13
iv. New Applications Only	13
B. EERE Funding Agreements	13
i. Interagency Agreements and Other Funding Mechanisms	13
III. Eligibility Information	14
A. Eligible Applicants – Federal Agencies	14
B. Cost Leveraging	16
ii. Legal Responsibility	17
iii. Cost Share Types and Allowability.....	17
iv. Cost Share Verification	17
C. Compliance Criteria	18
i. Compliance Criteria	18
D. Responsiveness Criteria.....	19
E. Limitation on Full Applications Eligible for Review	19
F. Questions Regarding Eligibility.....	19
IV. Application and Submission Information	19
A. Application Process	19
i. Additional Information on EERE Exchange	20
B. Application Forms	21
i. Content and Form of the Letter of Intent.....	21
C. Content and Form of the Full Application	22
i. Full Application Content Requirements.....	22
ii. Technical Volume	23
iii. SF-424: Application for Federal Assistance.....	27
iv. Summary/Abstract for Public Release	28
v. Summary Slide	28
vi. Lifecycle Cost Analysis	28
D. Content and Form of Replies to Reviewer Comments	29
E. Post-Award Information Requests	30

Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.

F.	Dun and Bradstreet Universal Numbering System Number and System for Award Management	30
G.	Submission Dates and Times	31
H.	Funding Restrictions	31
i.	Allowable Costs	31
V.	Application Review Information	31
A.	Technical Review Criteria	31
i.	Full Applications	31
ii.	Criteria for Replies to Reviewer Comments	33
B.	Standards for Application Evaluation	33
C.	Other Selection Factors	33
i.	Program Policy Factors	33
D.	Evaluation and Selection Process	34
i.	Overview	34
ii.	Pre-Selection Interviews	34
iii.	Pre-Selection Clarification	35
iv.	Selection	36
E.	Anticipated Notice of Selection and Award Dates	36
VI.	Award Administration Information	36
A.	Award Notices	36
i.	Ineligible Submissions	36
ii.	Full Application Notifications	36
iii.	Successful Applicants	36
iv.	Alternate Selection Determinations	37
v.	Unsuccessful Applicants	37
B.	Administrative and National Policy Requirements	37
i.	Registration Requirements	37
ii.	Foreign National Access to DOE Sites	39
iii.	National Policy Requirements	39
iv.	Environmental Review in Accordance with National Environmental Policy Act (NEPA)	39
v.	Statement of Federal Involvement	40
vi.	Intellectual Property Provisions	41
vii.	Reporting	41
viii.	Go/No-Go Review	41
VII.	Questions/Agency Contacts	41
VIII.	Other Information	42
A.	FOA Modifications	42
B.	Informational Webinar	42
C.	Government Right to Reject or Negotiate	42
D.	Commitment of Public Funds	42
E.	Treatment of Application Information	42
F.	Evaluation and Administration by Non-Federal Personnel	44
G.	Notice Regarding Eligible/Ineligible Activities	44
H.	Notice of Potential Disclosure Under Freedom of Information Act (FOIA)	44
I.	Requirement for Full and Complete Disclosure	44
J.	Retention of Submissions	45
K.	Rights in Technical Data	45

Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.

L. Personally Identifiable Information (PII)	45
Appendix A – Definitions and Acronyms	47
Appendix B – Federal Energy Efficiency Fund	50

I. Funding Opportunity Description

A. Description/Background

Under this FY2017 “Assisting Federal Facilities with Energy Conservation Technologies” (AFFECT) Funding Opportunity Announcement (FOA), the U.S. Department of Energy’s (DOE) Federal Energy Management Program (FEMP) will provide grants to Federal agencies for projects that are incorporated into a privately financed performance contract, such as an Energy Savings Performance Contract or Utility Energy Service Contract, or as part of a Power Purchase Agreement (PPA). Applications for projects that are financed through appropriations will also be considered. A key merit review criterion will be how much private and/or agency funds are leveraged against the FEMP AFFECT grant funding. Also, Applicants will be asked to show how the proposed project results are conducive to broader adoption at other Federal facilities and will impact the direction, strategy, and thinking of the agency to engage in similar efforts at other Federal facilities. There is only one phase in this FOA which corresponds to the development of a project or set projects that is defined by the applicant in the Full Application.

There are three topic areas to which an application may be submitted under this FOA: (1) Combined Heat and Power (CHP), (2) Renewable Energy and (3) Energy Efficiency Deep Retrofits. CHP is an efficient and clean approach to generating electric power and useful thermal energy from a single fuel source. Renewable energy includes electric or thermal energy generated from solar, wind, geothermal, biomass, landfill gas, municipal solid waste, and hydropower/ocean energy. Energy Efficiency Deep Retrofits are energy efficiency projects shown to be innovative and creative in moving beyond standard energy efficiency projects, which may include but are not be limited to the use of advanced technology, novel processes, exceptional energy savings or the application of integrated design. Integrated design is an approach to the design of a building which brings together design specialties that are usually considered separately such as architecture, structural engineering and heating, ventilation and air conditioning. Only one topic area may be included in each application. Only one application will be allowed for any site or for any project team.

Section 152 (f) of the Energy Policy Act of 1992 (EPAAct 1992), Public Law 102-486, as codified in 42 USC § 8256 (b), authorized the Secretary of Energy to establish a fund with the stated purpose of providing competitive grants to Federal agencies to assist them in meeting the energy and water conservation requirements of the

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

National Energy Conservation Policy Act (NECPA), 42 USC § 8253. DOE's Federal Energy Management Program (FEMP) funds and utilizes this Federal Energy Efficiency Fund (FEEF) to provide competitive grants that provide Federal agencies with an incentive to deploy commercially available energy efficiency technology.

As part of DOE's Office of Energy Efficiency and Renewable Energy (EERE), FEMP works with key individuals to accomplish energy change within organizations by bringing expertise from all levels of project and policy implementation to enable Federal agencies to meet energy-related goals and to provide energy leadership to the country. The AFFECT 2017 FOA will provide direct funding to Federal agencies for the development of capital projects to initiate, supplement, improve or otherwise increase the viability and deployment of the three topic areas at U.S. Federal government-owned facilities. The intent of the AFFECT FOA is for these capital projects to help facilitate the wider adoption of these technologies at other Federal facilities. Using the authority provided in Public Law 102-486, funding provided under the AFFECT FOA will implement FEMP's continuing efforts to promote widespread energy efficiency and renewable energy technology deployment in the Federal sector.

In addition to enabling agencies to reach their energy-related goals, this FOA also provides agencies the opportunity to achieve their small business contracting goals. DOE offers multiple contracting methods under which small business goals may be met, including its ESPC IDIQ contracts (which include small business subcontracting requirements) and the ENABLE program (which has eleven small business ESCOs that represent different socio-economic categories).

B. Topic Areas/Technical Areas of Interest

This FOA will facilitate the successful execution of energy efficiency and renewable energy projects at Federal facilities in a manner that will accelerate the adoption and installation of these technologies at other Federal facilities. Responsive Full Applications must, at minimum, provide an identification and preliminary analysis of a technically and economically viable capital project or set of projects at a specific Federally-owned site or set of sites that implements one of three topic areas. In conjunction with funds from this FOA, agencies must use appropriated funds or alternative project financing mechanisms such as ESPCs, UESCs, or PPAs to complete the projects. Both early and mature projects are encouraged, as EERE recognizes that each proposal will be at a unique stage of development. Projects must use the technologies identified below under three topic areas. **Only one topic area may be included in each Full Application, and the Full Application must clearly identify the topic area on which the project is focused. Only one**

Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.

Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.

Include FOA name and number in subject line.

Full Application may be submitted from the same project team, and only one Full Application may be submitted from a site.

i. Topic Area 1: Combined Heat and Power (CHP)

Combined Heat and Power (CHP) is an efficient and clean approach to generating electric power and useful thermal energy from a single fuel source. CHP is used either to replace or supplement conventional separate heat and power (SHP). Instead of purchasing electricity from the distribution grid and burning fuel in an on-site furnace or boiler to produce thermal energy, a Federal site or facility can use CHP to provide both energy services in one energy-efficient step. The use of CHP involves the recovery of thermal energy that would otherwise be wasted to produce additional power or useful thermal energy; as such, CHP can provide significant energy efficiency and environmental advantages over SHP. It is reasonable to expect a CHP system to operate at 65%–75% efficiency, a large improvement over the national average of 45% for these services when separately provided.

CHP may be configured either as a topping or bottoming cycle. In a topping cycle, fuel is combusted in a prime mover such as a gas turbine or reciprocating engine, generating electricity or mechanical power. Energy normally lost in the prime mover's hot exhaust and/or cooling systems is recovered to provide process heat, hot water, or space heating/cooling for the site. In a bottoming cycle, also referred to as waste heat to power, fuel is combusted to provide thermal input to a furnace or other industrial process and some of the heat rejected from the process is then used for power production. For optimal efficiency, CHP systems are typically designed and sized to meet a facility's baseload thermal demand.¹

ii. Topic Area 2: Renewable Energy

For the purposes of this FOA, "renewable energy" is defined as electric or thermal energy generated from solar, wind, geothermal, biomass, landfill gas, municipal solid waste, and/or hydropower/ocean energy. Full Applications submitted in response to this topic area must fall under one of these technology types. Descriptions of these renewable technologies are set forth below:

- **Solar:** Solar energy provides electricity, heating, and cooling for Federal facilities through four primary technology types: photovoltaics,

¹ Combined Heat and Power: A Clean Energy Solution. August 2012. US DOE and US EPA.
http://www1.eere.energy.gov/manufacturing/distributedenergy/pdfs/chp_clean_energy_solution.pdf.

concentrating solar power, solar hot water, and solar ventilation preheat. Solar energy can be used for electricity production or thermal energy.

- **Wind:** Federal agencies can harvest wind energy to generate electricity or mechanical power (e.g., windmills for water pumping). To generate electricity, wind rotates large blades on a turbine, which spin an internal shaft connected to a generator. The generator produces electricity, the amount of which depends on the size and scale of the turbine.
- **Geothermal:** Geothermal energy is produced from heat and hot water found within the earth. Federal agencies can harness geothermal energy for heating and cooling air and water, as well as for electricity production. The geothermal resource can be drawn from at or near the surface or miles deep. Geothermal systems move heat from these locations where it can be used more efficiently for thermal or electrical energy applications. The three typical uses include: geothermal heat pumps, direct-use applications, and power plant electricity.
- **Biomass:** Biomass energy is fuel, heat, or electricity produced from organic materials such as plants, residues, and waste. These organic materials span several sources, including agriculture, forestry, primary and secondary mill residues, urban waste, landfill gases, wastewater treatment plants, and dedicated energy crops. Biomass energy takes many forms ranging from: direct firing to produce electricity, co-firing with fossil fuels for electricity, direct firing of boiler for heating, direct firing for combined heat and power (CHP), gasification for CHP, and converted into liquid fuels.
- **Landfill Gas:** Landfill gases are a viable energy resource created during waste decomposition. Landfills are present in most communities. These resources can be tapped to generate heat and electricity. As organic waste decomposes, bio-gas is produced made up of roughly half methane, half carbon dioxide, and small amounts of non-methane organic compounds. The methane can be collected, converted, and used as an energy source instead of releasing it into the atmosphere or flaring it. The collected methane can be burned to generate thermal energy for heating. It can also be burned to create steam, which can then be used to drive a turbine that generates electricity. Using methane in these ways helps keep it out of the atmosphere, reducing air pollution.
- **Municipal Solid Waste:** Municipal solid waste, also known as waste-to-energy, generates electricity by burning solid waste as fuel. This generates

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

renewable electricity while also incinerating landfill and other municipal waste products such as trash, yard clippings and debris, furniture, food scraps, and other discarded items. The U.S. currently uses two waste-to-energy facility designs: mass burn and refuse-derived fuel. Incinerating municipal solid waste generates energy while reducing waste volumes by as much as 90% with ash disposal and air polluting emissions as the primary environmental impacts. Effective environmental management is needed to remove toxins prior to combustion to minimize pollutants.

- **Hydropower and Ocean:** Hydropower has been used for centuries to power machinery, but the use most commonly associated with hydropower is electricity production through dams. Hydrokinetic energy technology extracts energy from moving water without relying on dams to create hydrostatic energy potential. Hydrokinetic energy is also known as ‘run of river.’ Ocean energy refers to various forms of renewable energy harnessed from the ocean. Ocean energy includes but is not limited to energy from tidal, wave, current, and thermal.

iii. Topic Area 3: Energy Efficiency Deep Retrofits

The following definition of Energy Efficiency Deep Retrofits (EEDRs) will be employed:

EEDRs are energy efficiency projects shown to be innovative and creative in moving beyond standard energy efficiency projects, which may include but are not be limited to the use of advanced technology, novel processes, exceptional energy savings or the application of integrated design. Integrated design is an approach to the design of a building which brings together design specialties that are usually considered separately such as architecture, structural engineering and heating, ventilation and air conditioning.

C. Applications Specifically Not of Interest

The following types of applications will be deemed nonresponsive and will not be reviewed or considered (See Section III.D of the FOA):

- Applications that fall outside the technical parameters specified in Section I.B of the FOA.
- Applications that do not meet the minimum required cost leverage ratio (see Section III.B).
- Applications that include research and development activities.
- Applications that have not identified implementation sites.

Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.

Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.

Include FOA name and number in subject line.

- Applications that do not fall into one of the three topic area categories.
- Applications that designate more than one topic area.

D. Authorizing Statutes

The programmatic authorizing statute is 42 USC § 8256 (b), which is set forth in its entirety in Appendix C.

Awards made under this announcement will fall under the purview of 2 CFR Part 200 as amended by 2 CFR Part 910.

E. Project Performance Targets

Final Deliverable: The timing of funding for projects selected under this FOA will be based on the Recipient's execution of a Final Deliverable. Accordingly, Full Applications must clearly define a proposed Final Deliverable, which will ultimately be negotiated with EERE prior to grant award. The Final Deliverable must be a decision point in the project development process that ensures with a high degree of confidence that the project will ultimately be executed. It is anticipated that the Final Deliverable for this grant award will occur prior to the construction/installation phase of the project; therefore, the proposed Final Deliverable for this grant award should NOT include activities related to the installation, construction, commissioning, operation, data collection, or maintenance of the proposed system. Examples of potential Final Deliverables for a proposed renewable energy system include, but are not limited to, a contract or task order award; an equipment purchase order; or the receipt, review, and acceptance of a final proposal.

Project Reviews: Project continuation will be contingent upon the Recipient's satisfactory performance and EERE's critical milestone reviews. Critical milestones will be initially proposed in the Full Application and finalized during award negotiations. Critical milestones must represent significant decision points along the project development pathway. Appropriate critical milestones may include, but are not limited to, detailed feasibility analysis; project developer/vendor selection; final design completion; equipment selection; notice of intent to award; or investment grade audit. A critical milestone must occur at least once every six months over the duration of the grant award.

At the milestone review points, EERE will evaluate factors including, but not limited to, project performance, project schedule adherence, the extent to which the Recipient has met milestone objectives, the Recipient's compliance with

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

reporting requirements, and the project's overall contribution to the program goals and objectives. As a result of this evaluation, EERE may make a determination to continue supporting the project, re-direct the project, or discontinue supporting the project. Only those projects demonstrating a high probability of successfully meeting the program targets will be continued.

Project Schedule: It is the Applicant's responsibility to propose a project schedule that is both challenging and achievable. An overly aggressive and unrealistic schedule should be avoided because awards may be terminated, canceled, and/or payments may be withheld if the Final Deliverable is not met in accordance with the project schedule. Conversely, an overly conservative schedule is not desirable because of the potential negative impact on completing the project in a timely manner. The project schedule will be based on the content of the Full Application and finalized during award negotiations.

Project Impact: Responsive Full Applications must demonstrate that the experience gained through the proposed project will serve as an example that can lend itself to similar efforts at other Federal sites. Proposed projects will be evaluated not only in terms of the merits of the proposed project itself, but also on the ability of the proposed project to facilitate the enhanced consideration and implementation of similar technologies at additional Federal sites. Thus, a Full Application must not only describe the proposed project, but also demonstrate how the lessons learned from the proposed project can be applied to future projects.² Project impact may be further demonstrated through the reporting of screening results (or planned screenings) for additional relevant facilities/sites. See Section V for a complete discussion of the criteria upon which the Full Applications are evaluated.

Life-Cycle Cost Analysis: Projects must demonstrate that they are life-cycle cost-effective through a life-cycle cost analysis (LCCA) that adheres to 10 CFR 436, Subpart A, which "establishes a methodology and procedures for estimating and comparing the life cycle costs of Federal buildings, for determining the life cycle cost effectiveness of energy conservation measures and water conservation measures, and for rank ordering life cycle cost effective measures in order to design a new Federal building or to retrofit an existing Federal building."³ Applicants are required to calculate life-cycle cost-effectiveness in accordance with

² If applicable, project impact should include a discussion of how the proposed project assists the Federal agency in getting to or staying "green" on their OMB Sustainability and Energy Scorecard (<http://www.whitehouse.gov/administration/eop/ceq/sustainability/omb-scorecards>).

³ <http://www.law.cornell.edu/cfr/text/10/436/subpart-A>

Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.

Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.

Include FOA name and number in subject line.

10 CFR 436, Subpart A using the Building Life-Cycle Cost (BLCC) software program or equivalent.⁴

LCCA is an economic method of project evaluation in which all costs arising from owning, operating, maintaining, and disposing of a project are considered important to the decision. The LCCA method takes into account first costs, including capital investment costs, purchase, and installation costs; future costs, including energy costs, operating costs, maintenance costs, capital replacement costs, financing costs; and any resale, salvage, or disposal cost, over the life-time of the project. LCCA is well suited to the economic evaluation of design alternatives that satisfy a required performance level but may have differing investment, operating, maintenance, or repair costs, and possibly different life spans. It is particularly relevant to the evaluation of investments where high initial costs are traded for reduced future cost obligations. To determine the total LCC of a project, sum the present values of each kind of cost and subtract the present values of any positive cash flows such as a resale value. Thus, the following formula applies:

Life-cycle cost = first cost + maintenance and repair + energy + water + replacement-salvage value,

where all dollar amounts are converted to present values by discounting.⁵

A project is considered cost-effective if 1) life-cycle costs are estimated to be lower compared to the baseline system, 2) net savings are estimated to be positive, 3) the savings-to-investment ratio is estimated to be greater than one, or 4) the adjusted internal rate of return is estimated to be greater than the discount rate.

Cost Leveraging: In this FOA, the cost leverage ratio is defined as follows:

$CL = (TI - G)/G$ where

CL = Cost Leverage Ratio

TI = Total Investment or Total Allowable Costs for the topic area chosen by the applicant (i.e. the total allowable costs equals the sum of the EERE share and the Recipient share of allowable costs).

⁴ BLCC can be downloaded at no cost at <http://energy.gov/eere/femp/building-life-cycle-cost-programs>

⁵ For more information on LCCA, please reference FEMP's *Guidance on Life-Cycle Cost Analysis* http://energy.gov/sites/prod/files/2013/10/f3/lcc_guide_05.pdf.

Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.

Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.

Include FOA name and number in subject line.

G = amount of Grant.

The agency requesting financial assistance must provide a cost leverage ratio of **at least 1**.

Bundled Projects: Projects in each of the three topic areas proposed under this FOA may be “bundled” with other energy conservation measures (ECMs) such as through an ESPC or agency initiative. **Note, however, that funds provided under this FOA may only be used for the portions of these larger efforts that are part of the one topic area that was chosen by the applicant. Furthermore, the cost basis for determining the associated cost leverage ratio must be representative of only the portions of these larger efforts that is associated with the chosen topic area.**

To illustrate, consider a bundled project with the following characteristics:

Topic Area Chosen: Renewable Energy
Total Project Cost (including all ECMs): \$20M
Total Cost of Renewable Energy technologies: \$4M
Requested EERE Grant: \$1M

In this case, the cost leverage ratio (CL) would be 3 to 1.

II. Award Information

A. Award Overview

i. Estimated Funding

EERE expects to make approximately \$3.0 million of Federal funding available for new awards under this FOA, subject to the availability of appropriated funds.

EERE anticipates making approximately 4-10 awards under this FOA. EERE may issue one, multiple, or no awards. Individual awards may vary between \$100,000 and \$1.0 million.

EERE may issue awards in the following topic areas:

Combined Heat and Power (CHP), Renewable Energy (RE), and Energy Efficiency Deep Retrofits. See topic area descriptions in Section I.B of the FOA.

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

ii. Period of Performance

EERE anticipates making awards that will run up to 36 months in length, subject to the availability of appropriations. The period of performance for each award will be proposed in the Full Application by the Applicant and finalized during award negotiations between EERE and the Applicant.

After the grant award closeout process, Recipients may be contacted by FEMP for project updates, data collection, interviews, case studies, best practices, articles, online publications, or other documentation. Although participation in these post-award activities is strictly voluntary, FEMP would appreciate the Recipient's cooperation.

iii. Payment

EERE will use deliverable-based payments for awards issued under this FOA. Specifically, the Recipient will receive FOA funds only after the Final Deliverable(s) has been accomplished in accordance with the schedule negotiated between EERE and the Recipient. Payment will be made after the Final Deliverable is met and verified. EERE or a designated representative must review and approve the Final Deliverable(s) before payment is made. If the Final Deliverable is not met by the specified deadline, the award may be terminated, canceled, and/or payment(s) may be withheld at the sole discretion of EERE.

iv. New Applications Only

EERE will not consider applications for renewals of existing EERE-funded awards through this FOA. An agency may submit a proposal for a project or site that was not awarded a grant in a previous AFFECT FOA.

B. EERE Funding Agreements

i. Interagency Agreements and Other Funding Mechanisms

Because 42 USC § 8256 (b) requires the award of grants directly to Federal agencies, it is anticipated that funding for projects selected under this FOA will be provided through Interagency Agreements, Intra-agency Agreements, Work Authorizations or other appropriate funding mechanisms under the Federal Energy Efficiency Fund (FEEF) statutory authority. Any proposals, resulting terms (including payment terms), schedules, and deliverables will be incorporated and described in the funding agreement.

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

If a project submitted by a National Laboratory Contractor is selected for award, it is anticipated that the award funding will be provided to the sponsoring Federal agency in the manner described above, and the proposed work will be authorized by the sponsoring Federal agency through an appropriate funding mechanism, which may include but is not limited to: (i) an Interagency Agreement (if the sponsoring Federal agency is non-DOE); or (ii) an Intra-agency Agreement, Work Authorization or other funding mechanism (if the sponsoring Federal agency is DOE).

III. Eligibility Information

To be considered for substantive evaluation, an applicant's submission must meet the criteria set forth below. If the application does not meet these initial requirements, it will be considered non-responsive, removed from further evaluation, and ineligible for any award.

A. Eligible Applicants – Federal Agencies

The authorizing statute, Section 152 (f) of the Energy Policy Act of 1992 (EPAct 1992), Public Law 102-486, as codified in 42 USC § 8256 (b) requires that the grant recipients be Federal agencies. Therefore, Only U.S. Federal Agencies, Sub-Agencies, and National Laboratory Contractors (on behalf of their sponsoring Federal agencies) are eligible to apply for funding under this FOA. A domestic or overseas facility (existing or new) must be owned by the U.S. Federal government to be eligible.

B. Other Eligibility Requirements

For purposes of this FOA, a "National Laboratory Contractor" is defined as an organization responsible for the operation of a Federally-owned national laboratory (e.g., a Government Owned, Contractor Operated facility). A National Laboratory Contractor is eligible to apply for funding under this FOA, on behalf of its sponsoring Federal agency, subject to the following requirements:

Only U.S. Federal Agencies, Sub-Agencies, and National Laboratory Contractors are eligible to apply for funding under this FOA. A domestic or overseas facility (existing or new) must be owned by the U.S. Federal government to be eligible.

- i. The cognizant Federal Contracting Officer must provide written authorization for the National Laboratory Contractor to submit a Full Application, which authorization shall be submitted with the application.

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

- ii. In addition to any points of contact the National Laboratory Contractor provides for itself, the Full Application shall also provide the name of the sponsoring Federal agency, as well as the name, phone number and e-mail address of the cognizant Federal Contracting Officer and the agency's technical/project point of contact.
- iii. If a project submitted by a National Laboratory Contractor is selected for award, the award funding will be provided to the sponsoring Federal agency, and the proposed work will be authorized through an appropriate funding mechanism, which may include but is not limited to: (i) an Interagency Agreement (if the sponsoring Federal agency is non-DOE); or (ii) an Intra-agency Agreement, Work Authorization or other funding mechanism (if the sponsoring Federal agency is DOE). Accordingly, the sponsoring Federal agency will be responsible for executing any required documentation between itself and the Contractor and will also be responsible for payment of awarded funding to the National Laboratory Contractor.
- iv. In accordance with the foregoing requirements, the following wording is acceptable for the sponsoring agency's authorization:

Authorization is granted for the <insert National Laboratory Contractor name> to submit a Full Application in response to DOE Funding Opportunity Announcement DE-FOA-0001667 on behalf of the <insert Sponsoring Federal Agency name>. The project and work proposed by <insert National Laboratory Contractor Name> is consistent with <insert Sponsoring Federal Agency name> objectives for this facility. It is understood that if the submitted project is selected for funding, the award funding will be provided to the <insert Sponsoring Federal Agency name> and the proposed work will be authorized under an appropriate funding mechanism. It is also understood that <insert Sponsoring Federal agency name> will execute the appropriate documentation between itself and the <insert National Laboratory Contractor name> to assure payment of awarded funding and project compliance.

Sponsoring Federal Agency: _____

Contracting Officer – Name: _____

Contracting Officer – Phone Number: _____

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

Contracting Officer – E-mail Address: _____

Agency Project Contact – Name: _____

Agency Project Contact – Phone Number: _____

Agency Project Contact – E-mail Address: _____

B. Cost Leveraging

As discussed in Section I, the cost leverage ratio for this FOA is defined as follows:

$CL = (TI - G)/G$ where

CL = Cost Leverage Ratio

TI = Total Investment or Total Allowable Costs of the topic area chosen by the applicant (i.e. the total allowable costs equals the sum of the EERE share and the Recipient share of allowable costs).

G = amount of grant.

The agency requesting financial assistance must provide a Cost Leverage Ratio of **at least 1**. Pursuant to the considerations identified in 42 USC 8256 (b) (3) (c)-(d), such cost leveraging may come from either Federal or non-Federal sources. Private sector cost leveraging through an alternative financing mechanism—such as an ESPC or UESC contract—is strongly encouraged.

EERE will make the final determination regarding whether the Applicant has proposed appropriate cost leveraging based on the information above.

Cost leveraging above the minimum required will be considered during the merit review process and will increase the likelihood that an Applicant will be selected for funding.

i. Cost Leverage Allowability

Every cost leverage contribution must be allowable under the applicable Federal cost principles and this FOA. Recipients may not use the same contributions to meet cost leverage requirements for more than one project or program.

Cost leverage contributions must be specified in the project budget and necessary and reasonable for proper and efficient accomplishment of the project.

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

ii. Legal Responsibility

Although the cost share requirement applies to the project as a whole, including work performed by members of the project team other than the Prime Recipient, the Prime Recipient is legally responsible for paying the entire cost share. The Prime Recipient's cost share obligation is expressed in the Assistance Agreement as a static amount in U.S. dollars (cost share amount) and as a percentage of the Total Project Cost (cost share percentage). If the funding agreement is terminated prior to the end of the project period, the Prime Recipient is required to contribute at least the cost share percentage of total expenditures incurred through the date of termination.

The Prime Recipient is solely responsible for managing cost share contributions by the Project Team and enforcing cost share obligation assumed by Project Team members in subawards or related agreements.

iii. Cost Share Types and Allowability

Every cost leverage contribution must be allowable under the applicable Federal cost principles and this FOA. Recipients may not use the same contributions to meet cost leverage requirements for more than one project or program.

For the purposes of this FOA, cost leverage is essentially the total cost of developing and implementing the energy savings project, minus the EERE share.

Cost leverage contributions must be specified in the project budget and necessary and reasonable for proper and efficient accomplishment of the project.

iv. Cost Share Verification

Applicants should provide written assurance of their proposed cost leverage contributions in their Full Applications.

Upon selection for award negotiations, Applicants may be required to provide additional information and documentation regarding their cost leverage contributions.

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

C. Compliance Criteria

To be considered for substantive evaluation, an applicant submission must meet the Compliance criteria set forth below. **Letters of Intent and Full Applications must meet all Compliance criteria listed below or they will be considered noncompliant. EERE will not review or consider noncompliant submissions,** including Letters of Intent, Full Applications, and Replies to Reviewer Comments that were: submitted through means other than EERE Exchange; submitted after the applicable deadline; and/or submitted incomplete. EERE will not extend the submission deadline for applicants that fail to submit required information due to server/connection congestion.

i. Compliance Criteria

1. Letters of Intent

Letters of Intent are deemed compliant if:

- The applicant entered all required information and clicked the “Create Submission” button in EERE Exchange by the deadline stated in the FOA.

2. Full Applications

Full Applications are deemed compliant if:

- The applicant submitted a compliant Letter of Intent;
- The Full Application complies with the content and form requirements in Section IV.C of the FOA;
- The Full Application meets the eligibility, cost leverage, and other mandatory requirements of the FOA;
- The proposed project is responsive to the objectives of the FOA; and
- The Applicant entered all required information necessary for a meaningful review, successfully uploaded all required documents, and clicked the “Submit” button in EERE Exchange by the deadline stated in the FOA.

3. Replies to Reviewer Comments

Replies to Reviewer Comments are deemed compliant if:

- The Reply to Reviewer Comments complies with the content and form requirements in Section IV.D of the FOA; and

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

- The applicant successfully uploaded all required documents to EERE Exchange by the deadline stated in the FOA.

D. Responsiveness Criteria

All “Applications Specifically Not of Interest,” as described in Section I.C of the FOA, are deemed nonresponsive and are not reviewed or considered.

E. Limitation on Full Applications Eligible for Review

Applicants may submit one Full Application to this FOA only. Only one application may be submitted from the same project team, and only one application may be submitted from a site.

F. Questions Regarding Eligibility

EERE will not make eligibility determinations for potential applicants prior to the date on which applications to this FOA must be submitted. The decision whether to submit an application in response to this FOA lies solely with the applicant.

IV. Application and Submission Information

A. Application Process

The application process will include two phases: a Letter of Intent phase and a Full Application phase. **Only applicants who have submitted an eligible Letter of Interest will be eligible to submit a Full Application.** At each phase, EERE performs an initial eligibility review of the applicant submissions to determine whether they meet the eligibility requirements of Section III of the FOA. EERE will not review or consider submissions that do not meet the eligibility requirements of Section III. All submissions must conform to the following form and content requirements, including maximum page lengths (described below) and must be submitted via EERE Exchange at <https://eere-exchange.energy.gov/>, unless specifically stated otherwise. **EERE will not review or consider submissions submitted through means other than EERE Exchange, submissions submitted after the applicable deadline, and incomplete submissions.** EERE will not extend deadlines for applicants who fail to submit required information and documents due to server/connection congestion. A control number will be issued when an applicant begins the Exchange application process. This control number must be included with all Application documents, as described below.

The Full Application and Reply to Reviewer Comments must conform to the following requirements:

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

- Each must be submitted in Adobe PDF format unless stated otherwise.
- Each must be written in English.
- All pages must be formatted to fit on 8.5 x 11 inch paper with margins not less than one inch on every side. Use Times New Roman typeface, a black font color, and a font size of 12 point or larger (except in figures or tables, which may be 10 point font). A symbol font may be used to insert Greek letters or special characters, but the font size requirement still applies. References must be included as footnotes or endnotes in a font size of 10 or larger. Footnotes and endnotes are counted toward the maximum page requirement.
- The Control Number must be prominently displayed on the upper right corner of the header of every page. Page numbers must be included in the footer of every page.
- Each submission must not exceed the specified maximum page limit, including cover page, charts, graphs, maps, and photographs when printed using the formatting requirements set forth above and single spaced. If applicants exceed the maximum page lengths indicated below, EERE will review only the authorized number of pages and disregard any additional pages.

Applicants are responsible for meeting each submission deadline. **Applicants are strongly encouraged to submit their Letters of Intent and Full Applications at least 48 hours in advance of the submission deadline.** Under normal conditions (i.e., at least 48 hours in advance of the submission deadline), applicants should allow at least 1 hour to submit a Letter of Intent, Full Application, or Reply to Reviewer Comments. Once the Letter of Intent, Full Application, or Reply to Reviewer Comments is submitted in EERE Exchange, applicants may revise or update that submission until the expiration of the applicable deadline. If changes are made, the applicant must resubmit the Letter of Intent, Full Application, or Reply to Reviewer Comments before the applicable deadline.

EERE urges applicants to carefully review their Letters of Intent and Full Applications and to allow sufficient time for the submission of required information and documents. All Full Applications that pass the initial eligibility review will undergo comprehensive technical merit review according to the criteria identified in Section V.A of the FOA.

i. Additional Information on EERE Exchange

EERE Exchange is designed to enforce the deadlines specified in this FOA. The “Apply” and “Submit” buttons will automatically disable at the defined

Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.

Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.

Include FOA name and number in subject line.

submission deadlines. Should applicants experience problems with Exchange, the following information may be helpful.

Applicants that experience issues with submission PRIOR to the FOA deadline: In the event that an applicant experiences technical difficulties with a submission, the Application should contact the Exchange helpdesk for assistance (EERE-ExchangeSupport@hq.doe.gov). The Exchange helpdesk and/or the EERE Exchange system administrators will assist Applicants in resolving issues.

Applicants that experience issue with submissions that result in late submissions: In the event that an applicant experiences technical difficulties so severe that they are unable to submit their application by the deadline, the applicant should contact the Exchange helpdesk for assistance (EERE-ExchangeSupport@hq.doe.gov). The Exchange helpdesk and/or the EERE Exchange system administrators will assist the applicant in resolving all issues (including finalizing submission on behalf of and with the applicant's concurrence). **PLEASE NOTE**, however, those applicants who are unable to submit their application on time due to their waiting until the last minute when network traffic is at its heaviest to submit their materials will not be able to use this process.

B. Application Forms

The application forms and instructions are available on EERE Exchange. To access these materials, go to <https://eere-Exchange.energy.gov> and select the appropriate funding opportunity number.

Note: The maximum file size that can be uploaded to the EERE Exchange website is 10MB. Files in excess of 10MB cannot be uploaded, and hence cannot be submitted for review. If a file exceeds 10MB but is still within the maximum page limit specified in the FOA, it must be broken into parts and denoted to that effect. For example:

{{ControlNumber}}_{{LeadOrganization}}_Project_Part_1
{{ControlNumber}}_{{LeadOrganization}}_Project_Part_2, etc.

i. Content and Form of the Letter of Intent

To be eligible to submit a Full Application, applicants must submit a Letter of Intent by the specified due date and time. Letters of Intent will be used by EERE to plan for the merit review process. The letters should not contain any proprietary or sensitive business information. The letters will not be used for down-selection purposes, and do not commit an applicant to submit an application.

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

EERE will not review or consider ineligible Letters of Intent (see Section III of the FOA).

Each applicant must provide the following information as part of the Letter of Intent:

- Project Title;
- Lead Organization;
- Organization Type (Business < 500 Employees; Business > 1000 Employees; Business 500-1000 Employees; Federally Funded Research and Development Center (FFRDC); Government-Owned, Government Operated; Non-Profit; University);
- Abstract – The abstract provided should be not more than 200 words in length, and should provide a truncated explanation of the proposed project.
- The Project Team, including:
 - The Principal Investigator (PI);
 - Team Members; and
 - Key Participants (i.e., individuals who contribute in a substantive, measureable way to the execution of the proposed project);
- Topic area (only one topic area may be chosen); and
- Whether the Application has been previously submitted to EERE.

C. Content and Form of the Full Application

Applicants must submit a Full Application by the specified due date and time to be considered for funding under this FOA. Applicants must complete the following application forms found on the EERE Exchange website at <https://eere-Exchange.energy.gov/>, in accordance with the instructions.

All Full Application documents must be marked with the Control Number issued to the applicant. Applicants will receive a control number upon submission of their Letter of Intent, and should include that control number in the file name of their Full Application submission (i.e., Control number_Applicant Name_Full Application).

i. Full Application Content Requirements

EERE will not review or consider ineligible Full Applications (see Section III of the FOA).

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

Each Full Application shall be limited to a single project or set of related projects. Unrelated projects shall not be consolidated in a single Full Application.

Full Applications must conform to the following requirements:

Submission	Components	File Name
Full Application (PDF, unless stated otherwise)	Technical Volume (See Chart in Section IV.D.ii)	{{ControlNumber}}_{{LeadOrganization}}_TechnicalVolume
	SF-424	{{ControlNumber}}_{{LeadOrganization}}_App424
	Life-Cycle Cost Analysis Calculation (see also Section I)	{{ControlNumber}}_{{LeadOrganization}}_LCCACalculation
	Organizational Letters of Commitment (1-page maximum per letter)	{{ControlNumber}}_{{LeadOrganization}}_OrgLettersofCommitment
	Project Partner Letters of Commitment (1-page maximum per letter)	{{ControlNumber}}_{{LeadOrganization}}_PPLettersofCommitment
	Cost Leverage Verification (1-page maximum per letter)	{{ControlNumber}}_{{LeadOrganization}}_CostLeverageVerification
	Summary for Public Release (1 page limit)	{{ControlNumber}}_{{LeadOrganization}}_Summary
	Summary Slide (1 page limit, Microsoft PowerPoint format)	{{ControlNumber}}_{{LeadOrganization}}_Slide

Note: The maximum file size that can be uploaded to the EERE Exchange website is 10MB. Files in excess of 10MB cannot be uploaded, and hence cannot be submitted for review. If a file exceeds 10MB but is still within the maximum page limit specified in the FOA it must be broken into parts and denoted to that effect. For example:

{{ControlNumber}}_{{LeadOrganization}}_TechnicalVolume_Part_1
{{ControlNumber}}_{{LeadOrganization}}_TechnicalVolume_Part_2, etc.

EERE will not accept late submissions that resulted from technical difficulties due to uploading files that exceed 10MB.

EERE provides detailed guidance on the content and form of each component below.

ii. Technical Volume

The Technical Volume must be submitted in Adobe PDF format. The Technical Volume must conform to the following content and form requirements, including maximum page lengths. If applicants exceed the maximum page

Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.

lengths indicated below, EERE will review only the authorized number of pages and disregard any additional pages. This volume must address the Merit Review Criteria as discussed in Section V.A of the FOA. Save the Technical Volume in a single PDF file using the following convention for the title: “{{ControlNumber}}_{{LeadOrganization}}_TechnicalVolume”.

Applicants must provide sufficient citations and references to the primary research literature to justify the claims and approaches made in the Technical Volume. However, EERE and reviewers are under no obligation to review cited sources.

The Technical Volume to the Full Application may not be more than 10 pages (excluding the Cover Page), including the table of contents, all citations, charts, graphs, maps, photos, or other graphics, and must include all of the information in the table below. The applicant should consider the weighting of each of the evaluation criteria (see Section V.A of the FOA) when preparing the Technical Volume.

SECTION/PAGE LIMIT	DESCRIPTION
Cover Page (1 page, not included in 10 page limit)	Applicant must provide the project title, topic area, lead organization, project location, Principal Investigator (PI) and team members, project budget (EERE and cost leverage), project duration, and any statements regarding confidentiality on this page. Note: only one topic area may be chosen.
Project Description (about 6-7 pages)	<p>The Project Description is the portion of the Full Application in which an Applicant must describe and clearly demonstrate the viability of its proposed project, and must contain the following information:</p> <p>Background</p> <ul style="list-style-type: none"> The Applicant should discuss the history, prior efforts, successes, and current development status of the proposed project. This section should identify an established, well-defined baseline/current system that the proposed project will replace, supplement, or enhance, including facility descriptions, energy loads, current energy costs, and impacted equipment. <p>Technical Overview</p> <ul style="list-style-type: none"> This section should identify the proposed Final Deliverable and expected outcomes of the project. The Applicant should provide a narrative discussion of the project goals and objectives that will be pursued under this effort over its duration. This section should explicitly identify targeted

Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.

	<p>performance improvements and economic benefits to the baseline system and critical success factors. Project specifications, such as the technology to be employed, target level of performance, energy and cost savings estimates, project size, and project site(s) should be included. Applicants should specifically explain why the project is feasible, viable, and has a high probability of achieving the cost and performance targets, Final Deliverable, and project goals.</p> <ul style="list-style-type: none"> • If a project for a given topic area is bundled with other technologies such as through an Energy Savings Performance Contract or agency initiative, please provide a brief summary of those other technologies and the costs associated with them. Note that the grant would apply only to the technology of the topic area chosen by the applicant. • The key risks/issues associated with the project and associated mitigation strategies. <p>Economic Overview</p> <ul style="list-style-type: none"> • The life-cycle cost effectiveness of the project must be provided per 10 CFR 436, Subpart A. In the project narrative, the applicant should show a comparison of the life-cycle cost with the project completed to the baseline life-cycle cost without the project. Separate from the Project Narrative, a detailed LCCA calculation must be included in a separate attachment. This document should include all relevant supporting data and assumptions – a model for this document would be the “Comparative Analysis Report” from the software program entitled Building Life Cycle Cost (BLCC). See Section I of the FOA. • For Deep Retrofit projects, the Applicant must show that the project is innovative and creative in moving beyond standard procedure for energy efficiency projects. This innovation may include, but is not limited to, the use of advanced technology, novel processes, greater-than-average energy savings or the application of integrated building design. <p>Project Impact</p> <ul style="list-style-type: none"> • Clearly show how the proposed project results are conducive to broader adoption at other Federal facilities and will impact the direction, strategy, and thinking of the agency to engage in similar efforts at other Federal facilities. • Describe the direct and indirect impacts that this project would have on meeting Federally-mandated energy management requirements for Federal facilities as reflected in reporting requirements such as the OMB Sustainability and Energy Scorecard. • Describe the impact that EERE funding would have on the proposed project. Applicants should specifically explain how EERE
--	--

Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.

	<p>funding, relative to prior, current, or anticipated funding from Federal or non-Federal sources will help achieve the project objectives.</p> <p>Cost Leverage</p> <ul style="list-style-type: none"> Clearly identify the cost leverage for the project. Identify and describe the source of the cost leverage funds (non-EERE funds) and how the cost leverage funds will be spent. Summarize the content of the cost leverage verification as discussed in Section I. Details of Cost Leverage Verification should be included in a separate file per Section III. For bundled projects, the cost basis for determining the cost leverage ratio must be representative of only the portions of these larger efforts that is associated with the topic area chosen by the applicant (see Section I.E).
<p>Project Management Plan and Budget (About 2 pages)</p>	<p>Project Management Plan</p> <ul style="list-style-type: none"> The Project Management Plan must fully describe how the Applicant will achieve the project objectives. It must provide a clear, concise description of all activities to be conducted over the period of performance. A complete Project Management Plan will contain the following information: <ul style="list-style-type: none"> A high-level statement of the Final Deliverable(s). See Section I of the FOA. The general approach to be utilized to execute the project (e.g. in-house, contractors, vendors, ESCOs). A Project Schedule which includes a detailed description of specific activities and key, verifiable metrics demonstrating project performance, progress, and completion, including: <ul style="list-style-type: none"> Tasks (e.g. 1.1, 2.2) with distinctive title and date range of activity in months (e.g. m1-m4). Tasks describe the most general themes of work that will be completed to meet the project's objectives and should be a few sentences to one paragraph. Tasks are enabled by a collection of Subtasks. Subtasks (e.g. 1.1.1, 1.2.2) offer a detailed breakdown of the work to be done to complete a Task and should be one to two sentences. Subtasks are specific activities required to execute a given Task. Critical Milestones (e.g. M1, M2) are schedule-driven, verifiable milestones that demonstrate achievement of Tasks/Subtasks and project progress. The successful achievement of milestones determines whether or not a project is on track to meet the Final Deliverable on time and to specification. At least one critical milestone must be proposed every six months.

Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.

	<ul style="list-style-type: none"> If selected for an award, the proposed Project Management Plan will form the basis for award negotiations, during which EERE may require revisions to establish the Final Work Plan. <p>Budget</p> <ul style="list-style-type: none"> Identify the proposed funds requested from FEMP and how the EERE funds will be spent. Identify where the non-EERE funds will be obtained. If there is third party funding, describe the nature of the agreement. Identify where possible cost overruns may occur.
Team and Resources (About 1-2 pages)	<p>The Team and Resources section of the Project Narrative must describe the Project Team’s qualifications, expertise, equipment, and/or facilities that will facilitate the successful completion of the proposed project. The description must clearly and succinctly describe:</p> <ul style="list-style-type: none"> The Applicant’s capability to successfully complete the project on time and to specification. This section should also include previous work efforts and how these enable the Applicant to achieve the project objectives. The site infrastructure, resources, facilities, and equipment necessary for project implementation, including whether the site is ready as-is or requires modifications/upgrades. A description of the Project Team, including Project Partner Letters of Commitment for any identified project partners. Letters of Commitment must be included as a separate attachment. The team’s proposed management plan, including the roles of and relationships between each Project Team member. The organizational commitment to the development and successful execution of the project, including Organizational Letters of Commitment. Letters of Commitment must be included as a separate attachment.

iii. SF-424: Application for Federal Assistance

Complete all required fields in accordance with the instructions on the form.

The list of certifications and assurances in Field 21 can be found at

<http://energy.gov/management/office-management/operational-management/financial-assistance/financial-assistance-forms>, under

Certifications and Assurances. Note: The dates and dollar amounts on the SF-424 are for the complete project period and not just the first project year, first phase or other subset of the project period. Save the SF-424 in a single PDF file using the following convention for the title

“{{ControlNumber}}_{{LeadOrganization}}_App424”.

Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.

Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.

Include FOA name and number in subject line.

iv. Summary/Abstract for Public Release

Applicants are required to submit a one-page summary/abstract of their project. The project summary/abstract must contain a summary of the proposed activity suitable for dissemination to the public. It should be a self-contained document that identifies the name of the applicant, the project director/principal investigator(s), the project title, the objectives of the project, a description of the project, including methods to be employed, the potential impact of the project (e.g., benefits, outcomes), and major participants (for collaborative projects). This document must not include any proprietary or sensitive business information as DOE may make it available to the public after selections are made. The project summary must not exceed 1 page when printed using standard 8.5 x 11 paper with 1" margins (top, bottom, left, and right) with font not smaller than 12 point. Save the Summary for Public Release in a single PDF file using the following convention for the title "ControlNumber_LeadOrganization_Summary".

v. Summary Slide

Applicants are required to provide a single PowerPoint slide summarizing the proposed project. The slide must be submitted in Microsoft PowerPoint format. This slide is used during the evaluation process. Save the Summary Slide in a single file using the following convention for the title "ControlNumber_LeadOrganization_Slide".

The Summary Slide template requires the following information:

- A technology Summary;
- A description of the technology's impact, e.g. Size;
- Project Location;
- Any key graphics (illustrations, charts and/or tables);
- The project's key idea/takeaway;
- Project title, Prime Recipient, Principal Investigator, and Key Participant information; and
- Requested EERE funds and proposed applicant cost share.

vi. Lifecycle Cost Analysis

Projects must demonstrate that they are life-cycle cost-effective through a life-cycle cost analysis (LCCA) that adheres to 10 CFR 436, Subpart A, which "establishes a methodology and procedures for estimating and comparing the life cycle costs of Federal buildings, for determining the life cycle cost effectiveness of energy conservation measures and water conservation measures, and for rank ordering life cycle cost effective measures in order to

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

design a new Federal building or to retrofit an existing Federal building.” Applicants are required to calculate life-cycle cost-effectiveness in accordance with 10 CFR 436, Subpart A using the Building Life-Cycle Cost (BLCC) software program or equivalent. In the Project Narrative, the applicant should show a comparison of the life-cycle cost with the project completed to the baseline life-cycle cost without the project. Separate from the Project Narrative, a detailed LCCA calculation must be included in a separate attachment. The detailed LCCA calculation must include all relevant supporting data and assumptions – a model for this document would be the “Comparative Analysis Report” from the BLCC (see also Section III).⁶

D. Content and Form of Replies to Reviewer Comments

EERE will provide applicants with reviewer comments following evaluation of all eligible Full Applications. Applicants will have a brief opportunity to review the comments and to prepare a short Reply to Reviewer Comments responding to comments however they desire or supplementing their Full Application. The Reply to Reviewer Comments is an optional submission; applicants are not required to submit a Reply to Reviewer Comments. EERE will notify applicants via email when the Reviewer Comments are available for reply. The expected submission deadline is on the cover page of the FOA; however, it is the applicant’s responsibility to monitor email in the event that the expected date changes. The deadline will not be extended for applicants who are unable to timely submit their reply due to failure to check email or relying on the expected date alone. Applicants should anticipate having approximately three (3) business days to submit Replies to Reviewer Comments.

EERE will not review or consider ineligible Replies to Reviewer Comments (see Section VI of the FOA). EERE will review and consider each eligible Full Application, even if no Reply is submitted or if the Reply is found to be ineligible.

Replies to Reviewer Comments must conform to the following content and form requirements, including maximum page lengths, described below. If a Reply to Reviewer Comments is more than three pages in length, EERE will review only the first three (3) pages and disregard any additional pages.

⁶ BLCC can be downloaded at no cost at <http://energy.gov/eere/femp/building-life-cycle-cost-programs>

SECTION	PAGE LIMIT	DESCRIPTION
Text	2 pages max	Applicants may respond to one or more reviewer comments or supplement their Full Application.
Optional	1 page max	Applicants may use this page however they wish; text, graphs, charts, or other data to respond to reviewer comments or supplement their Full Application are acceptable.

E. Post-Award Information Requests

If selected for award, EERE reserves the right to request additional or clarifying information for any reason deemed necessary, including but not limited to:

- Additional budget information;
- Additional Commitment Letters from third parties contributing to cost leverage, if applicable; or
- Information addressing potential project impacts to the human or natural environment, including but not limited to EERE's Environmental Questionnaire.

F. Dun and Bradstreet Universal Numbering System Number and System for Award Management

Each applicant (unless the applicant is an individual or Federal awarding agency that is excepted from those requirements under 2 CFR §25.110(b) or (c), or has an exception approved by the Federal awarding agency under 2 CFR §25.110(d)) is advised to: (1) Register in the System for Award Management (SAM) at <https://www.sam.gov> before submitting its application; (2) provide a valid Dun and Bradstreet Universal Numbering System (DUNS) number in its application; and (3) continue to maintain an active SAM registration with current information at all times during which it has an active Federal award or an application or plan under consideration by a Federal awarding agency, as this registration and information will be required upon selection for award. DOE may not make a Federal award to an applicant until the applicant has complied with all applicable DUNS and SAM requirements and, if an applicant has not fully complied with the requirements by the time DOE is ready to make a Federal award, the DOE may determine that the applicant is not qualified to receive a Federal award and use that determination as a basis for making a Federal award to another applicant.

Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.

G. Submission Dates and Times

Letters of Intent, Full Applications, and Replies to Reviewer Comments must be submitted in EERE Exchange no later than 5 p.m. Eastern on the dates provided on the cover page of this FOA.

H. Funding Restrictions

i. Allowable Costs

All expenditures must be allowable, allocable, and reasonable in accordance with the applicable Federal cost principles.

V. Application Review Information

A. Technical Review Criteria

i. Full Applications

Applications will be evaluated against the merit review criteria shown below.

Criteria	Weighting
Technical and Economic Merit	25%
Project Impact	30%
Cost Leverage	25%
Project Management Plan and Budget	20%

Criterion 1: Technical and Economic Merit (25%)

Technical and Economic Merit

- Extent to which the Application specifically and convincingly identifies, describes, and analyzes the proposed project, including its projected probability of success in reaching the Final Deliverable and project goals.
- Adequacy of the description of the proposed site(s), baseline system(s), and project development history and current status.
- Degree of technical and economic benefit of the project as compared to the current baseline system at the proposed site(s).
- Extent to which the proposed project is technically and economically viable, including energy and cost savings, cost-effectiveness, relevant supporting data, reasonable assumptions, and discussion of prior efforts that support the validity of the project.
- Adequacy of life-cycle cost analysis.

Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.

- Discussion and demonstrated understanding of the project through the identification of key project risk areas (including but not limited to technical, financial, system integration, and environmental risks) and the quality of the mitigation strategies to address them.
- **For Deep Retrofit projects, the degree to which the energy efficiency projects are shown to be innovative and creative in moving beyond standard procedure for energy efficiency projects.**

Criterion 2: Project Impact (30%)

Project Impact

- Degree to which the proposed project results are conducive to broader adoption at other Federal facilities and will impact the direction, strategy, and thinking of the agency to engage in similar efforts at other Federal facilities.
- Potential and likelihood of the proposed project to substantially move the site and the agency toward the achievement of energy-related goals as set forth by Federal statute as reflected in annual reporting requirements such as the OMB Sustainability and Energy Scorecard.

Criterion 3: Cost Leverage (25%)

Cost Leverage

- Extent to which the project leverages EERE award funds with committed agency-appropriated funds and/or financing from other non-Federal sources.

Criterion 4: Project Management Plan and Budget (20%)

Approach and Proposed Work Plan

- Degree to which the approach has been clearly described and thoughtfully considered.
- Quality of a clear, detailed, complete, timely, and reasonable Proposed Work Plan, including a schedule with interrelated tasks and milestones that leads to the successful completion of the project goals.
- Relevance, viability, and clear definition of a proposed Final Deliverable for the project.

Team

- The capability of the Project Team to develop a successful project on time and to specification.
- Clarity, adequacy, and completeness of explanation of the appropriate roles of and relationships between each Project Team member.

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

Resources

- Adequacy (quality, availability, and appropriateness) of infrastructure, resources, facilities, and equipment to support achievement of the proposed project objectives.
- Organizational commitment to developing and successfully completing the project.

Budget

- Reasonableness and appropriateness of the proposed budget.

ii. Criteria for Replies to Reviewer Comments

EERE has not established separate criteria to evaluate Replies to Reviewer Comments. Instead, Replies to Reviewer Comments are attached to the original applications and evaluated as an extension of the Full Application.

B. Standards for Application Evaluation

Applications that are determined to be eligible will be evaluated in accordance with this FOA, by the standards set forth in EERE's Notice of Objective Merit Review Procedure (76 Fed. Reg. 17846, March 31, 2011) and the guidance provided in the "Department of Energy Merit Review Guide for Financial Assistance," which is available at: <http://energy.gov/sites/prod/files/meritrev.pdf>.

C. Other Selection Factors

i. Program Policy Factors

In addition to the above criteria, the Selection Official may consider the following program policy factors in determining which Full Applications to select for award negotiations:

- The degree to which the proposed project, including proposed cost leverages, optimizes the use of available EERE funding to achieve programmatic objectives;
- Technical, market, organizational, and environmental risks associated with the project;
- The degree to which the proposed project directly addresses EERE's statutory mission and strategic goals;
- The degree to which the proposed project is consistent with FEMP's mission and overall goals and objectives;
- The diversity of technologies and approaches (including the degree to which the proposed project would be complementary to and support the

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

existing portfolio of projects to achieve the overall goals and objectives of FEMP);

- The geographic distribution of projects;
- The diversity of agencies or sub-agencies in the project portfolio;
- The degree to which the project has a positive impact for other Federal agencies;
- Whether the applicant is a Climate Action Champion designated under DOE's Request for Applications DE-FOA-0001189 (RFA) or the applicant has a letter of support from a Climate Action Champion designated under the above referenced RFA;

In recognition of the importance of the dual policy goals of reducing greenhouse gas emissions and enhancing climate resilience, the U.S. Department of Energy (DOE) – in close collaboration with other Federal agencies – launched the Climate Action Champion initiative to identify and showcase U.S. local and tribal governments that have proven to be climate leaders through pursuing opportunities to advance both of these goals in their communities. Recently, DOE selected sixteen (16) U.S. local governments and tribal governments – or regional collaborations or consortia thereof – that demonstrated a strong and ongoing commitment to implementing strategies that both reduce greenhouse gas emissions and enhance climate resilience, with a particular emphasis on strategies that further both goals.

<http://www.whitehouse.gov/blog/2014/12/03/announcing-first-class-climate-action-champions> .

D. Evaluation and Selection Process

i. Overview

The evaluation process consists of multiple phases; each includes an initial eligibility review and a thorough technical review. Rigorous technical reviews of eligible submissions are conducted by reviewers that are experts in the subject matter of the FOA. Ultimately, the Selection Official considers the recommendations of the reviewers, along with other considerations such as program policy factors, in determining which applications to select.

ii. Pre-Selection Interviews

As part of the evaluation and selection process, EERE may invite one or more applicants to participate in Pre-Selection Interviews. Pre-Selection Interviews are distinct from and more formal than pre-selection clarifications (See Section

Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.

Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.

Include FOA name and number in subject line.

V.D of the FOA). The invited applicant(s) will meet with EERE representatives to provide clarification on the contents of the Full Applications and to provide EERE an opportunity to ask questions regarding the proposed project. The information provided by applicants to EERE through Pre-Selection Interviews contributes to EERE's selection decisions.

EERE will arrange to meet with the invited applicants in person at EERE's offices or a mutually agreed upon location. EERE may also arrange site visits at certain applicants' facilities. In the alternative, EERE may invite certain applicants to participate in a one-on-one conference with EERE via webinar, videoconference, or conference call.

EERE will not reimburse applicants for travel and other expenses relating to the Pre-Selection Interviews, nor will these costs be eligible for reimbursement as pre-award costs.

EERE may obtain additional information through Pre-Selection Interviews that will be used to make a final selection determination. EERE may select applications for funding and make awards without Pre-Selection Interviews. Participation in Pre-Selection Interviews with EERE does not signify that applicants have been selected for award negotiations.

iii. Pre-Selection Clarification

EERE may determine that pre-selection clarifications are necessary from one or more applicants. Pre-selection clarifications are distinct from and less formal than pre-selection interviews. These pre-selection clarifications will solely be for the purposes of clarifying the application, and will be limited to information already provided in the application documentation. The pre-selection clarifications may occur before, during or after the merit review evaluation process. Information provided by an applicant that is not necessary to address the pre-selection clarification question will not be reviewed or considered. Typically, a pre-selection clarification will be carried out through either written responses to EERE's written clarification questions or video or conference calls with EERE representatives.

The information provided by applicants to EERE through pre-selection clarifications is incorporated in their applications and contributes to the merit review evaluation and EERE's selection decisions. If EERE contacts an applicant for pre-selection clarification purposes, it does not signify that the applicant has been selected for negotiation of award or that the applicant is among the top ranked applications.

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

EERE will not reimburse applicants for expenses relating to the pre-selection clarifications, nor will these costs be eligible for reimbursement as pre-award costs.

iv. Selection

The Selection Official may consider the technical merit, the Federal Consensus Board's recommendations, program policy factors, and the amount of funds available in arriving at selections for this FOA.

E. Anticipated Notice of Selection and Award Dates

EERE anticipates notifying applicants selected for negotiation of award by the Summer of 2017 and making awards during Fall of 2017.

VI. Award Administration Information

A. Award Notices

i. Ineligible Submissions

Ineligible Full Applications will not be further reviewed or considered for award. The Contracting Officer will send a notification letter by email to the technical and administrative points of contact designated by the applicant in EERE Exchange. The notification letter will state the basis upon which the Full Application is ineligible and not considered for further review.

ii. Full Application Notifications

EERE will notify applicants of its determination via a notification letter by email to the technical and administrative points of contact designated by the applicant in EERE Exchange. The notification letter will inform the applicant whether or not its Full Application was selected for award negotiations. Alternatively, EERE may notify one or more applicants that a final selection determination on particular Full Applications will be made at a later date, subject to the availability of funds or other factors.

iii. Successful Applicants

Receipt of a notification letter selecting a Full Application for award negotiations does not authorize the applicant to commence performance of the project. If an application is selected for award negotiations, it is not a commitment by EERE to issue an award. Applicants do not receive an award until award negotiations are complete and the Contracting Officer executes the funding agreement.

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

The award negotiation process will take approximately 60 days. Applicants must designate a primary and a backup point-of-contact in EERE Exchange with whom EERE will communicate to conduct award negotiations. The applicant must be responsive during award negotiations (i.e., provide requested documentation) and meet the negotiation deadlines. If the applicant fails to do so or if award negotiations are otherwise unsuccessful, EERE will cancel the award negotiations and rescind the Selection. EERE reserves the right to terminate award negotiations at any time for any reason.

iv. Alternate Selection Determinations

In some instances, an applicant may receive a notification that its application was not selected for award and EERE designated the application to be an alternate. As an alternate, EERE may consider the Full Application for Federal funding in the future. A notification letter stating the Full Application is designated as an alternate does not authorize the applicant to commence performance of the project. EERE may ultimately determine to select or not select the Full Application for award negotiations.

v. Unsuccessful Applicants

EERE shall promptly notify in writing each applicant whose application has not been selected for award or whose application cannot be funded because of the unavailability of appropriated funds.

B. Administrative and National Policy Requirements

i. Registration Requirements

There are several one-time actions before submitting an application in response to this FOA, and it is vital that applicants address these items as soon as possible. Some may take several weeks, and failure to complete them could interfere with an applicant's ability to apply to this FOA, or to meet the negotiation deadlines and receive an award if the application is selected. These requirements are as follows:

1. EERE Exchange

Register and create an account on EERE Exchange at <https://eere-Exchange.energy.gov>.

This account will then allow the user to register for any open EERE FOAs that are currently in EERE Exchange. It is recommended that each organization or business unit, whether acting as a team or a single entity,

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

use only one account as the contact point for each submission. Applicants should also designate backup points of contact so they may be easily contacted if deemed necessary. **This step is required to apply to this FOA.**

The EERE Exchange registration does not have a delay; however, **the remaining registration requirements below could take several weeks to process and are necessary for a potential applicant to receive an award under this FOA.** Therefore, although not required in order to submit an application through the EERE Exchange site, all potential applicants not yet registered with SAM or FedConnect should complete those registrations as soon as possible.

2. DUNS Number

Obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number (including the plus 4 extension, if applicable) at <http://fedgov.dnb.com/webform>.

3. System for Award Management

Register with the System for Award Management (SAM) at <https://www.sam.gov>. Designating an Electronic Business Point of Contact (EBiz POC) and obtaining a special password called an MPIN are important steps in SAM registration. Please update your SAM registration annually.

4. FedConnect

Register in FedConnect at <https://www.fedconnect.net>. To create an organization account, your organization's SAM MPIN is required. For more information about the SAM MPIN or other registration requirements, review the FedConnect Ready, Set, Go! Guide at http://www.fedconnect.net/FedConnect/Marketing/Documents/FedConnect_Ready_Set_Go.pdf.

5. Grants.gov

Register in Grants.gov (<http://www.grants.gov>) to receive automatic updates when Amendments to this FOA are posted. However, please note that Letters of Intent and Full Applications will not be accepted through Grants.gov.

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

6. Electronic Authorization of Applications and Award Documents

Submission of an application and supplemental information under this FOA through electronic systems used by the Department of Energy, including EERE Exchange and FedConnect.net, constitutes the authorized representative's approval and electronic signature.

ii. Foreign National Access to DOE Sites

All applicants that ultimately enter into an award resulting from this FOA will be subject to the following requirement concerning foreign national involvement. Upon DOE's request, Prime Recipients must provide information to facilitate DOE's responsibilities associated with foreign national access to DOE sites, information, technologies, and equipment. A foreign national is defined as any person who was born outside the jurisdiction of the United States, is a citizen of a foreign government, and has not been naturalized under U.S. law. If the Prime Recipient or Subrecipients, contractors or vendors under the award, anticipate utilizing a foreign national person in the performance of an award, the Prime Recipient is responsible for providing to the Contracting Officer specific information of the foreign national(s) to satisfy compliance with all of the requirements for access approval.

iii. National Policy Requirements

The National Policy Assurances that are incorporated as a term and condition of award are located at: <http://www.nsf.gov/awards/managing/rtc.jsp>.

iv. Environmental Review in Accordance with National Environmental Policy Act (NEPA)

EERE's decision whether and how to distribute federal funds under this FOA is subject to the National Environmental Policy Act (42 USC 4321, *et seq.*). NEPA requires Federal agencies to integrate environmental values into their decision-making processes by considering the potential environmental impacts of their proposed actions. For additional background on NEPA, please see DOE's NEPA website, at <http://nepa.energy.gov/>.

While NEPA compliance is a Federal agency responsibility and the ultimate decisions remain with the Federal agency, all recipients selected for an award will be required to assist in the timely and effective completion of the NEPA process in the manner most pertinent to their proposed project. If DOE determines certain records must be prepared to complete the NEPA review process (e.g., biological evaluations or environmental assessments), the costs to prepare the necessary records may be included as part of the project costs.

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

v. Statement of Federal Involvement

1. Review Meetings

The Recipient, including but not limited to, the principal investigator (or, if applicable, co-principal investigators), is required to participate in periodic review meetings with EERE. Review meetings enable EERE to assess the work performed under this Award and to determine whether the Recipient has achieved milestones in a timely manner.

EERE shall determine the frequency of review meetings and select the day, time, and location of each review meeting and shall do so in a reasonable and good faith manner. EERE will provide the Recipient with reasonable notice of the review meetings. For each review meeting, the Recipient is required to provide a comprehensive overview of the project, including the Recipient's technical progress compared to the Statement of Project Objectives other subject matter specified by the EERE Technology Office Director.

2. Project Meetings

The Recipient is required to notify EERE in advance of scheduled project meetings. Upon request by EERE, the Recipient is required to provide EERE with reasonable access (by telephone, webinar, or otherwise) to the project meetings and tests. The Recipient is not expected to delay any work under this Award for the purpose of government insight.

3. Site Visits

EERE may conduct site visits to review the work performed under this Award, to inspect property and records relating to this Award, to assess the Recipient's implementation of audit findings, and to review the Recipient's compliance with the terms and conditions of this Award and applicable Federal laws and regulations. EERE will provide reasonable advance notice of site visits and minimize interference with ongoing work, to the maximum extent practicable.

4. Technical Milestones

The Statement of Project Objectives will establish the milestones. If the Recipient fails to achieve two or more milestones and deliverables, EERE may renegotiate the Statement of Project Objectives. In the alternative, EERE may deem the Recipient's failure to achieve these milestones and deliverables to be material noncompliance with the terms and conditions of this Award and take action to terminate the Award.

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

5. EERE Access

The Recipient must provide any information, documents, site access, or other assistance requested by EERE for the purpose of its Federal involvement.

vi. Intellectual Property Provisions

Intellectual property rights for non-Federal contractors, such as ESPC contractors, will be set forth in the contracts between the Recipient and the contractor(s). If the funding agreement is issued by a National Laboratory Contractor, the intellectual property terms of the National Laboratory Contractor's Management and Operating (M&O) Contract will apply.

vii. Reporting

Periodic project status reports, calls, and meetings may be required.

viii. Go/No-Go Review

In the award phase, there will be no milestones that would be appropriate for a Go/No Go milestone. There will only be one budget period, and funds will be released in a lump sum when the applicant achieves its final deliverable. The final deliverable will be negotiated with the recipient and it will be at a point where EERE can be reasonably assured that a capital project will take place, but before any construction begins.

VII. Questions/Agency Contacts

Upon the issuance of a FOA, EERE personnel are prohibited from communicating (in writing or otherwise) with applicants regarding the FOA except through the established question and answer process as described below. Specifically, questions regarding the content of this FOA must be submitted to: FOA.AFFECT4@ee.doe.gov. After submitting a question to FOA mailbox, applicants should return to Q&A answer log on EERE Exchange. **You will not receive a personal response, the response to your question will be posted to the Q&A log.** Questions must be submitted not later than 3 business days prior to the application due date and time.

All questions and answers related to this FOA will be posted on EERE Exchange at: <https://eere-exchange.energy.gov>. **Please note that you must first select this specific FOA Number in order to view the questions and answers specific to this FOA.** EERE will attempt to respond to a question within 3 business days, unless a similar question and answer has already been posted on the website.

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

Questions related to the registration process and use of the EERE Exchange website should be submitted to: EERE-ExchangeSupport@hq.doe.gov.

VIII. Other Information

A. FOA Modifications

Amendments to this FOA will be posted on the EERE Exchange website and the Grants.gov system. However, you will only receive an email when an amendment or a FOA is posted on these sites if you register for email notifications for this FOA in Grants.gov. EERE recommends that you register as soon after the release of the FOA as possible to ensure you receive timely notice of any amendments or other FOAs.

B. Informational Webinar

EERE will conduct one informational webinar during the FOA process. It will be held after the initial FOA release but before the due date for Letters of Intent.

Attendance is not mandatory and will not positively or negatively impact the overall review of any applicant submissions. As the webinar will be open to all applicants who wish to participate, applicants should refrain from asking questions or communicating information that would reveal confidential and/or proprietary information specific to their project. Specific dates for the webinar can be found on the cover page of the FOA.

C. Government Right to Reject or Negotiate

EERE reserves the right, without qualification, to reject any or all applications received in response to this FOA and to select any application, in whole or in part, as a basis for negotiation and/or award.

D. Commitment of Public Funds

The Contracting Officer is the only individual who can make awards or commit the Government to the expenditure of public funds. A commitment by anyone other than the Contracting Officer, either express or implied, is invalid.

E. Treatment of Application Information

In general, EERE will only use data and other information contained in applications for evaluation purposes, unless such information is generally available to the public or is already the property of the Government.

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

Applicants should not include trade secrets or commercial or financial information that is privileged or confidential in their application unless such information is necessary to convey an understanding of the proposed project or to comply with a requirement in the FOA.

The use of protective markings such as “Do Not Publicly Release – Trade Secret” or “Do Not Publicly Release – Confidential Business Information” is encouraged. However, applicants should be aware that the use of protective markings is not dispositive as to whether information will be publicly released pursuant to the Freedom of Information Act, 5 U.S.C. §552, et. seq., as amended by the OPEN Government Act of 2007, Pub. L. No. 110-175. (See Section I of this document, “Notice of Potential Disclosure Under the Freedom of Information Act (FOIA)” for additional information regarding the public release of information under the Freedom of Information Act.

Applicants are encouraged to employ protective markings in the following manner:

The cover sheet of the application must be marked as follows and identify the specific pages containing trade secrets or commercial or financial information that is privileged or confidential:

Notice of Restriction on Disclosure and Use of Data:

Pages [list applicable pages] of this document may contain trade secrets or commercial or financial information that is privileged or confidential, and is exempt from public disclosure. Such information shall be used or disclosed only for evaluation purposes or in accordance with a financial assistance or loan agreement between the submitter and the Government. The Government may use or disclose any information that is not appropriately marked or otherwise restricted, regardless of source.

[End of Notice]

The header and footer of every page that contains trade secrets or commercial or financial information that is privileged must be marked as follows: “May contain trade secrets or commercial or financial information that is privileged or confidential and exempt from public disclosure.”

In addition, each line or paragraph containing trade secrets or commercial or financial information that is privileged or confidential must be enclosed in brackets.

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

F. Evaluation and Administration by Non-Federal Personnel

In conducting the merit review evaluation, the Go/No-Go Review and Peer Review, the Government may seek the advice of qualified non Federal personnel as reviewers. The Government may also use non-Federal personnel to conduct routine, nondiscretionary administrative activities. The applicant, by submitting its application, consents to the use of non-Federal reviewers/administrators. Non-Federal reviewers must sign conflict of interest and non-disclosure agreements prior to reviewing an application. Non-Federal personnel conducting administrative activities must sign a non-disclosure agreement.

G. Notice Regarding Eligible/Ineligible Activities

Eligible activities under this FOA include those which describe and promote the understanding of scientific and technical aspects of specific energy technologies, but not those which encourage or support political activities such as the collection and dissemination of information related to potential, planned or pending legislation.

H. Notice of Potential Disclosure Under Freedom of Information Act (FOIA)

Under the Freedom of Information Act, (FOIA), 5 U.S.C. §552, et. seq., as amended by the OPEN Government Act of 2007, Pub. L. No. 110-175, any information received from the Applicant is considered to be an agency record, and as such, subject to public release under FOIA. The purpose of the FOIA is to afford the public the right to request and receive agency records unless those agency records are protected from disclosure under one or more of the nine FOIA exemptions. Decisions to disclose or withhold information received from the Applicant are based upon the applicability of one or more of the nine FOIA exemptions, not on the existence or nonexistence of protective markings or designations. Only the agency's designated FOIA Officer may determine if information received from the Applicant may be withheld pursuant to one of the nine FOIA exemptions. All FOIA requests received by DOE are processed in accordance with 10 C.F.R. Part 1004.

I. Requirement for Full and Complete Disclosure

Applicants are required to make a full and complete disclosure of all information requested. Any failure to make a full and complete disclosure of the requested information may result in:

- The termination of award negotiations;
- The modification, suspension, and/or termination of a funding agreement;

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

- The initiation of debarment proceedings, debarment, and/or a declaration of ineligibility for receipt of Federal contracts, subcontracts, and financial assistance and benefits; and
- Civil and/or criminal penalties.

J. Retention of Submissions

EERE expects to retain copies of all Letters of Intent, Full Applications, Replies to Reviewer Comments, and other submissions. No submissions will be returned. By applying to EERE for funding, applicants consent to EERE's retention of their submissions.

K. Rights in Technical Data

Data rights differ based on whether data is first produced under an award or instead was developed at private expense outside the award.

“Limited Rights Data”: The U.S. Government will not normally require delivery of confidential or trade secret-type technical data developed solely at private expense prior to issuance of an award, except as necessary to monitor technical progress and evaluate the potential of proposed technologies to reach specific technical and cost metrics.

EERE normally retains unlimited rights in technical data produced under Government financial assistance awards, including the right to distribute to the public. However, pursuant to special statutory authority, certain categories of data generated under EERE awards may be protected from public disclosure for up to five years after the data is generated (“Protected Data”). For awards permitting Protected Data, the protected data must be marked as set forth in the awards intellectual property terms and conditions and a listing of unlimited rights data (i.e., non-protected data) must be inserted into the data clause in the award. In addition, invention disclosures may be protected from public disclosure for a reasonable time in order to allow for filing a patent application.

L. Personally Identifiable Information (PII)

All information provided by the Applicant must to the greatest extent possible exclude Personally Identifiable Information (PII). The term “personally identifiable information” refers to information which can be used to distinguish or trace an individual's identity, such as their name, social security number, biometric records, etc. alone, or when combined with other personal or identifying information which is linked or linkable to a specific individual, such as date and place of birth, mother's maiden name, etc. (See OMB Memorandum M-07-16 dated May 22,

Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.

Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.

Include FOA name and number in subject line.

2007, found at:

<https://www.whitehouse.gov/sites/default/files/omb/memoranda/fy2007/m07-16.pdf>

By way of example, Applicants must screen resumes to ensure that they do not contain PII such as personal addresses, phone/cell numbers, personal emails and/or SSNs. In short, if the PII is not essential to the application, it should not be in the application.

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

APPENDIX A – DEFINITIONS AND ACRONYMS

"Applicant" means the legal entity or individual signing the Full Application. This entity or individual may be one organization or a single entity representing a group of organizations (such as a Consortium) that has chosen to submit a single Full Application in response to a FOA.

"Application" means the documentation submitted in response to a FOA.

"Award" means the written documentation executed by a Contracting Officer, after an Applicant is selected, which contains the negotiated terms and conditions for providing Financial Assistance to the Applicant. A Financial Assistance Award may be a Grant, Cooperative Agreement, or Technology Investment Agreement.

"Budget" means the cost expenditure plan submitted in the Full Application, including both the EERE contribution and the Applicant Cost Leverage.

"Combined Heat and Power" is an approach to generating electric power and useful thermal energy from a single fuel source.

"Compliance" is an eligibility determination that refers to the non-technical requirements outlined in a FOA (e.g., formatting, timeliness of submission, or satisfaction of prerequisites).

"Contracting Officer" means the EERE official authorized to execute Awards on behalf of EERE and who is responsible for the business management and non-Technology Office aspects of the Financial Assistance process.

"Cost Leverage Ratio (CL)" can be represented by the following formula: $CL = (TI - G) / G$ where TI is total investment in the topic area chosen by the applicant and G is the value of the grant awarded by the Office of Energy Efficiency and Renewable Energy.

"EERE Exchange" is the Department of Energy, Energy Efficiency and Renewable Energy's web system for posting Federal FOAs and receiving applications. EERE Exchange may be found at <https://eere-exchange.energy.gov>.

"Energy Efficiency Deep Retrofit" is an energy efficiency project shown to be innovative and creative in moving beyond a standard energy efficiency project, which may include but is not limited to the use of advanced technology, novel processes, exceptional energy savings or the application of integrated design. Integrated design is an approach to the design of a building which brings together design specialties that are usually considered separately such as architecture, structural engineering and heating, ventilation and air conditioning.

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

“ESPC” – Energy Savings Performance Contract.

“Final Deliverable” is a decision point in the project development process that ensures with a high degree of confidence that the project will ultimately be executed. Under this FOA, the Recipient will receive FOA funds only after the Final Deliverable has been accomplished in accordance with the schedule negotiated between EERE and the Recipient.

“Financial Assistance” means the transfer of money or property to an Applicant or Participant to accomplish a public purpose of support authorized by Federal statute.

“Funding Opportunity Announcement (FOA)” is a publicly available document by which a Federal agency makes known its intentions to award discretionary grants or cooperative agreements, usually as a result of competition for funds. FOAs may be known as FOAs, notices of funding availability, solicitations, or other names depending on the agency and type of program.

“Grant” means a Financial Assistance instrument used by EERE to transfer money or property when the principal purpose of the transaction is to accomplish a public purpose of support or stimulation authorized by Federal statute, and no Substantial Involvement is anticipated between EERE and the Applicant during the performance of the contemplated activity.

“Grants.gov” is the “storefront” web portal which allows organizations to electronically find grant opportunities from all Federal grant-making agencies. Grants.gov is THE single access point for over 900 grant programs offered by the 26 Federal grant-making agencies. It can be accessed at <http://www.grants.gov>.

“Key Personnel” mean the individuals who will have significant roles in planning and implementing the proposed Project on the part of the Applicant and Participants, including FFRDCs.

“PPA” – Power Purchase Agreement.

“Principal Investigator” refers to the technical point of contact/Project Manager for a specific project award.

“Project” means the set of activities described in a Full Application that is approved by EERE for Financial Assistance (whether such Financial Assistance represents all or only a portion of the support necessary to carry out those activities).

“Project Team” means the team which consists of the Prime Recipient, Subrecipients, and others performing or otherwise supporting work under an EERE funding agreement.

*Questions about this FOA? Email FOA.AFFECT4@ee.doe.gov.
Problems with EERE Exchange? Email EERE EERE-ExchangeSupport@hq.doe.gov.
Include FOA name and number in subject line.*

"Proposal" is the term used to describe the documentation submitted in response to a FOA. Also see Application.

"Recipient" means the organization or other entity that receives a Financial Assistance Award from EERE (i.e., is the signatory on the award), is financially accountable for the use of any EERE funds or property provided for the performance of the Project, and is legally responsible for carrying out the terms and condition of the award.

"Renewable Energy" is the electric or thermal energy generated from solar, wind, geothermal, biomass, landfill gas, municipal solid waste, and/or hydropower/ocean energy (for purposes of this FOA).

"Responsiveness" is an eligibility determination that refers to the objective technical requirements (not goals or targets) outlined in a FOA, such as a technology type or technical parameters. For example, submission of a photovoltaic solar panel design in response to a FOA calling for innovative geothermal drilling technologies should be found nonresponsive. Likewise, a Full Application with a design that incorporates rare earth materials to a FOA that prohibits the use of rare earth materials should be found nonresponsive. Conversely, the belief that a technology will not achieve the technical targets of the FOA will never be used as a proper basis for a rejection as nonresponsive.

"Selection" means the determination by the EERE Selection Official that negotiations take place for certain Projects with the intent of awarding a Financial Assistance instrument.

"Selection Official" means the EERE official designated to select Full Applications for negotiation toward Award under a subject FOA.

"Total Project Cost" means all the funds to complete the effort proposed by the Applicant, including EERE funds (including direct funding of any FFRDC) plus all other funds that will be committed by the Applicant as Cost Sharing.

"UESC" – Utility Energy Savings Contract.

APPENDIX B – FEDERAL ENERGY EFFICIENCY FUND

Section 152 (f) of the Energy Policy Act of 1992 (EPAcT 1992), Public Law 102-486, as codified in 42 USC § 8256 (b), authorized the Secretary of Energy to establish a Federal Energy Efficiency Fund (FEEF) with the stated purpose to provide financial assistance to agencies to assist them in meeting the energy and water conservation requirements of the National Energy Conservation Policy Act (NECPA), 42 USC § 8253(a)-(b). Since 1992, these goals have been amended and additional goals have been established by Executive Order and the Energy Independence and Security Act of 2007.

The law states the following:

(b) Federal Energy Efficiency Fund

- (1) The Secretary shall establish a Federal Energy Efficiency Fund to provide grants to agencies to assist them in meeting the requirements of section 8253 of this title.
- (2) Not later than June 30, 1993, the Secretary shall issue guidelines to be followed by agencies submitting proposals for such grants. All agencies shall be eligible to submit proposals for grants under the Fund.
- (3) The Secretary shall award grants from the Fund after a competitive assessment of the technical and economic effectiveness of each agency proposal. The Secretary shall consider the following factors in determining whether to provide funding under this subsection:
 - (A) The cost-effectiveness of the project.
 - (B) The amount of energy and cost savings anticipated to the Federal Government.
 - (C) The amount of funding committed to the project by the agency requesting financial assistance.
 - (D) The extent that a proposal leverages financing from other non-Federal sources.
 - (E) Any other factor which the Secretary determines will result in the greatest amount of energy and cost savings to the Federal Government.
- (4) There are authorized to be appropriated, to remain available to be expended, to carry out this subsection not more than \$10,000,000 for fiscal year 1994, \$50,000,000 for fiscal year 1995, and such sums as may be necessary for fiscal years thereafter.